

**510(k) SUMMARY— Apaceram™ Bone Void Filler**

Submitter Name: Pentax Corporation  
Submitter Address: 2-36-9 Maeno-cho  
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New Ceramics Division  
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001 2 9 2007

Date Prepared: July 11, 2007

Device Trade Name: Apaceram™ Bone Graft Substitute  
Device Common Name: Synthetic, porous hydroxylapatite  
Classification Number: 21 CFR 888.3045  
Classification Name: Resorbable calcium salt bone void filler  
Product Code: MQV

Predicate Devices: K033722, ApaPore® Bone Graft Substitute, ApaTech Ltd.  
K051774, MBCP™, Biomatlante.

Statement of Intended Use: Apaceram™ Bone Graft Substitute is a synthetic hydroxyapatite provided in several particulate and shaped sizes. It is intended for use as a bone void filler for bony voids, gaps, or defects that are not intrinsic to the stability of the bony structure. Apaceram™ is intended to be placed into bony voids or gaps of the skeletal system (i.e. extremities, spine, or pelvis) caused by degeneration, trauma or surgery. It also can be used with autograft as a bone graft extender. Apaceram™ is resorbed and replaced with bone during the healing process.

Device Description: Apaceram™ is a hydroxyapatite osteoconductive bone void filler. It is available in four types: AX, B, G, and R, which vary in porosity, shape and sizes. Apaceram™ is provided sterile for single patient use.

Technological Characteristics and Substantial Equivalence: The Apaceram™ and the predicate devices are similar in design, material composition, final product configurations, and function. They are made of calcium salts, are osteoconductive, and provide an interconnected, highly porous scaffold environment for new bone ingrowth. The safety and biocompatibility testing performed by Pentax and a long history of safe clinical use of this material support the safety and effectiveness of Apaceram™ and its equivalence to the predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Pentax Corp.  
% Patsy J. Trisler, J.D., RAC  
Regulatory Consultant  
5600 Wisconsin Avenue  
Suite 509  
Chevy Chase, Maryland 20815

OCT 29 2007

Re: K071912  
Trade/Device Name: Apaceram™ Bone Graft Substitute  
Regulation Number: 21 CFR 888.3045  
Regulation Name: Resorbable calcium salt bone void filler device  
Regulatory Class: Class II  
Product Code: MQV  
Dated: July 11, 2007  
Received: July 11, 2007

Dear Ms. Trisler:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

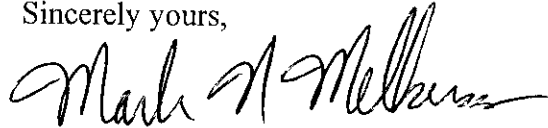
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 - Patsy J. Trisler, J.D., RAC

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson". The signature is fluid and cursive, with the first name "Mark" being the most prominent.

Mark N. Melkerson  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known): \_\_\_\_\_

Device Name: Apaceram™ Bone Graft Substitute

**Indications for Use:**

Apaceram™ Bone Graft Substitute is a synthetic hydroxyapatite provided in several particulate and shaped sizes. It is intended for use as a bone void filler for bony voids, gaps, or defects that are not intrinsic to the stability of the bony structure. Apaceram™ is intended to be placed into bony voids or gaps of the skeletal system (i.e. extremities, spine, or pelvis) caused by degeneration, trauma or surgery. It also can be used with autograft as a bone graft extender. Apaceram™ is resorbed and replaced with bone during the healing process.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE  
OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

(Posted November 13, 2003)



(Division Sign-Off)

Division of General, Restorative,  
and Neurological Devices

510(k) Number

K071912